

Figure 1

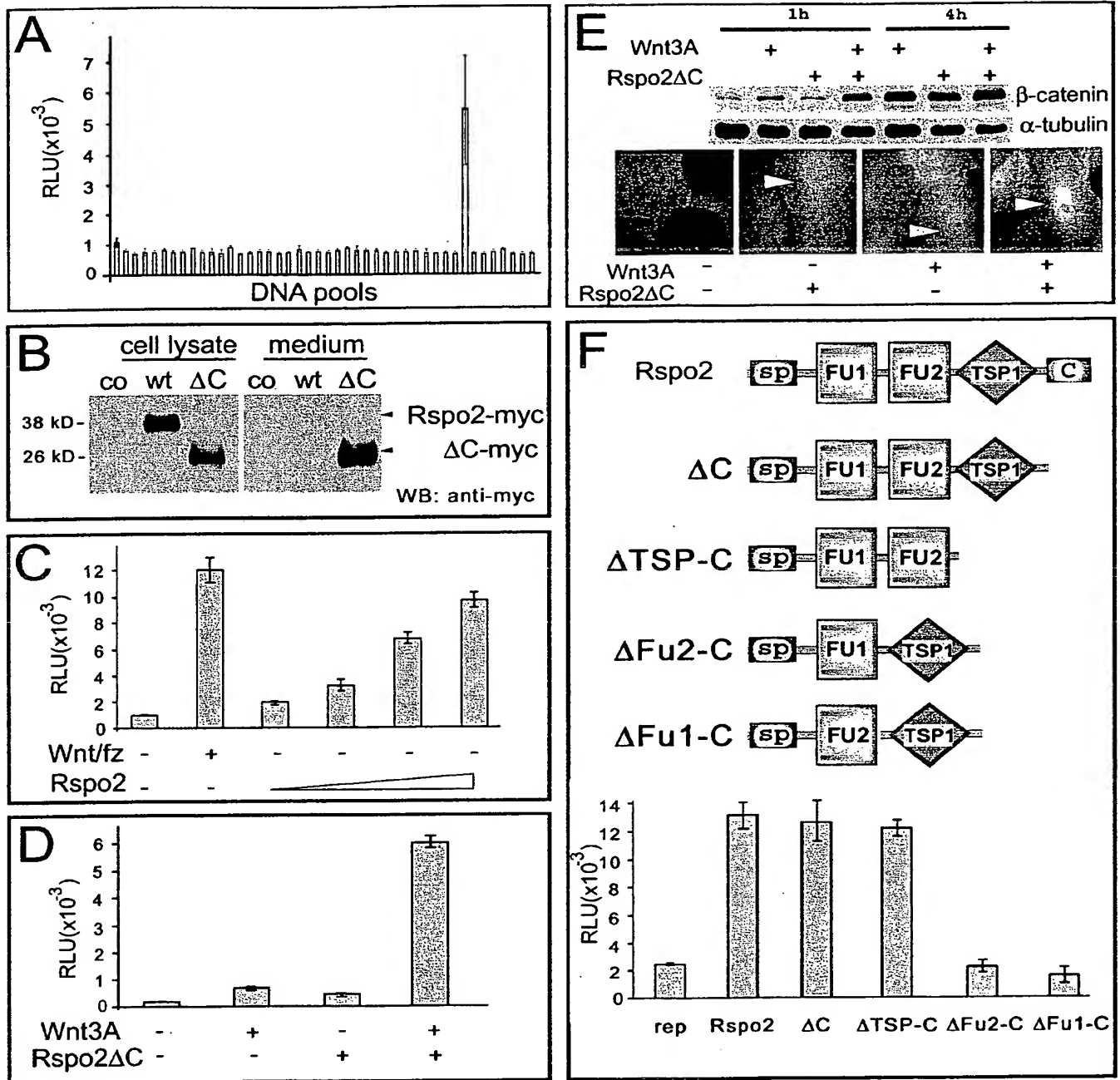


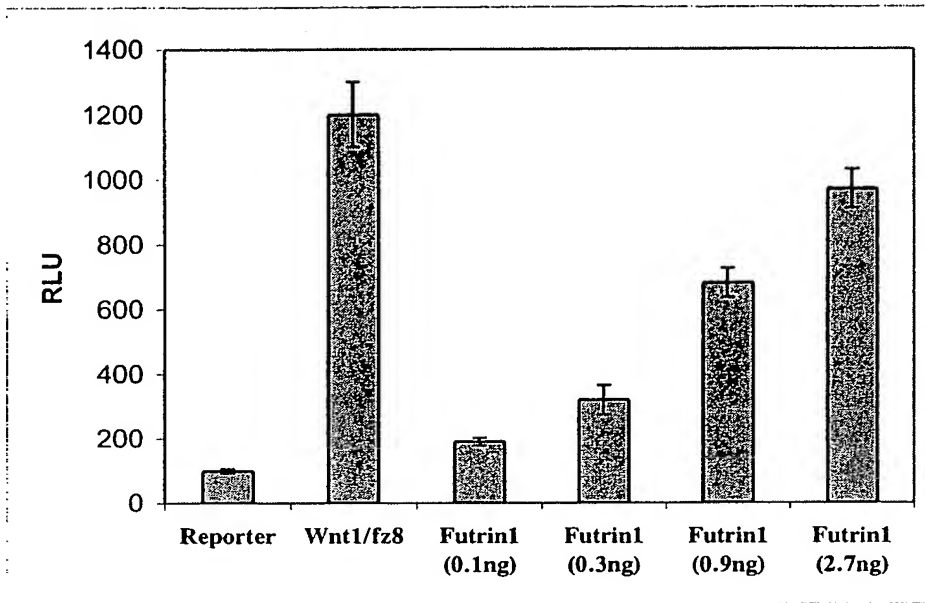
Figure 2

3/17

Figure 3

Figure 4

A



B

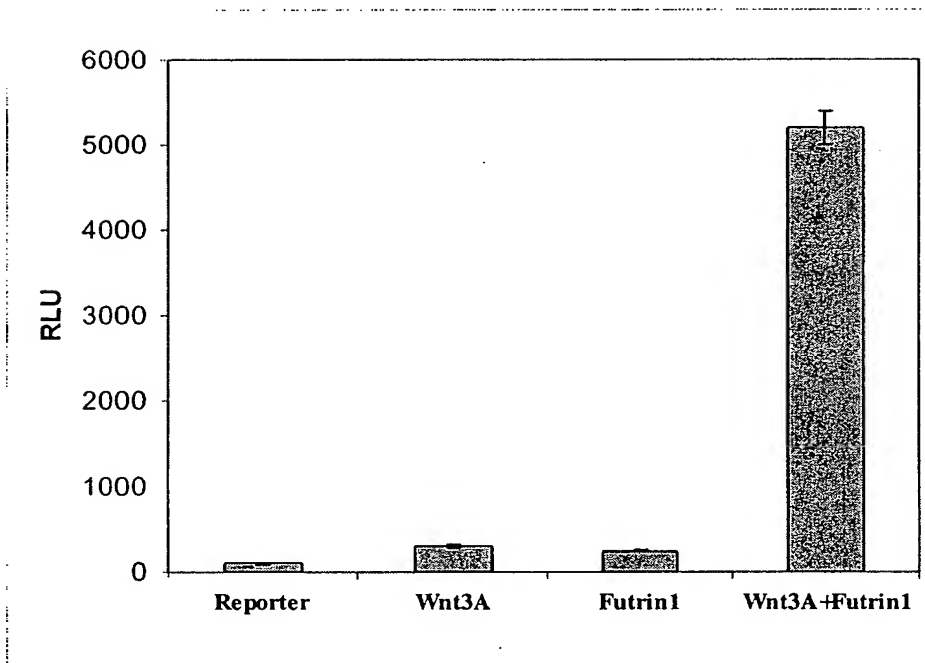


Figure 5

A

hR-spondin1 251 **MRLGLCVVALVLSWTHLTISR**. **GIKGRQRRTSAEGSOA** **CAKGCELCEVNGCLKCSPK**
hR-spondin2 261 **MQFRLFSFALLILNCMDVSHCQ**. **CNRWRRSKRASVSNPICKG**. **CLSCSKDNGCSR** **COQK**
hR-spondin3 271 **MHLRLISWLFILNFMETIGSONAS** **RGRQRRMHPNVSQ** **COGGCAT** **CSDYNGCLSCKPR**
hR-spondin4 281 **MRAPLCLLLLVAAHAVDMLALNR**. **RKQVGTGLGGNCTG**. **CHICSEENG** **CGSTCQQR**

signal peptide furin-like domain 1

hR-spondin1 60 **LFI** **LLERND** **IRQVGVCLPSCPP** **GYEDARNPDMNKCI**. **CKIEHCEACFS** **HNFTKCKEGLY**
hR-spondin2 59 **LFFFLRREG** **ROYGECLHSCPS** **GYGHRAPDMNR** **CAR** **CRIENC** **CDSCFSKD** **FCTKCKVGFY**
hR-spondin3 61 **LFEALERIG** **KQIGVCLSSCP** **SGYGT** **TRYPDIN** **KCTCKAD**. **CDT** **CFNKN** **FCTKCKSGFY**
hR-spondin4 54 **LELF** **ERREG** **ROYGKCLHD** **CPP** **GYEGIR** **GOEVNR** **CKKCGAT**. **CE** **SCFSQ** **DFCIRCKRQFY**

furin-like domain 2

hR-spondin1 119 **LHKGRCYPAC** **PEGSSAANGTMECSSPAQ** **CEMSEWSPWGPC** **SKKQOLCGFRRGSEERTRRM**
hR-spondin2 119 **LHGRSFDE** **CPDGFAPLEETMECVEG**. **CEVGHWSEWGT** **CRNNRTCGFKWGLET** **TRQI**
hR-spondin3 120 **LHLGKCLDNC** **PEGLEANNHTMECVSIVH** **CEVSEWNPWSPC** **KKGKTCGFKRG** **TETRVREI**
hR-spondin4 113 **LYKGKCLPT** **CPPGTLAHONTRECQGE**. **CELGPWGGWSPC** **THNGKTCGSAW** **GLESRVREA**

thrombospondin type 1 domain

hR-spondin1 180 **LHAPVGDHAA** **CSDTKETRRCTVRRVPCPEGOKR**. . . **RKGGQGRREN**. **ANRNLARKE**
hR-spondin2 160 **VKKPVKDTIP** **CPTIAESRRCKMTMRHCPGGKRT**. . . **PKAKEKRNKK**. . . **K**. . . **KRKLIERA**
hR-spondin3 163 **LOHPSAKGNL** **CPPTNETRRCTVOREKCKQGERG**. . . **KKGREPKRKKPNK** **GESKEAPDSK**
hR-spondin4 154 **GRAGHEEAA** **TCQVLSESRKCP** **FOR**. **PCP**. **GERSPGQ** **KKGRKDRRPR**. **KDRKLDRL**

hR-spondin1 231 **SKEAGAGSRRRK** **GOQQQQQ** **QGGT** **VGPLTSAGPA** -----
hR-spondin2 229 **QEGHSVFF** **ATDRANQ** -----
hR-spondin3 237 **SLES** **SKE** **PEQREN** **KQQQK** **KRK** **VQDKQKSVSVSTVH**
hR-spondin4 224 **D** -----

B

hRspo2	39.9		
hRspo3	43.7	45.9	
hRspo4	40.3	43.9	41.2
	hRspo1	hRspo2	hRspo3

C

mRspo2	40.5	95.5	44.2	44.8
XRspo2	40.8	83.5	43.8	42.2
	hRspo1	hRspo2	hRspo3	hRspo4

Figure 6

7/17

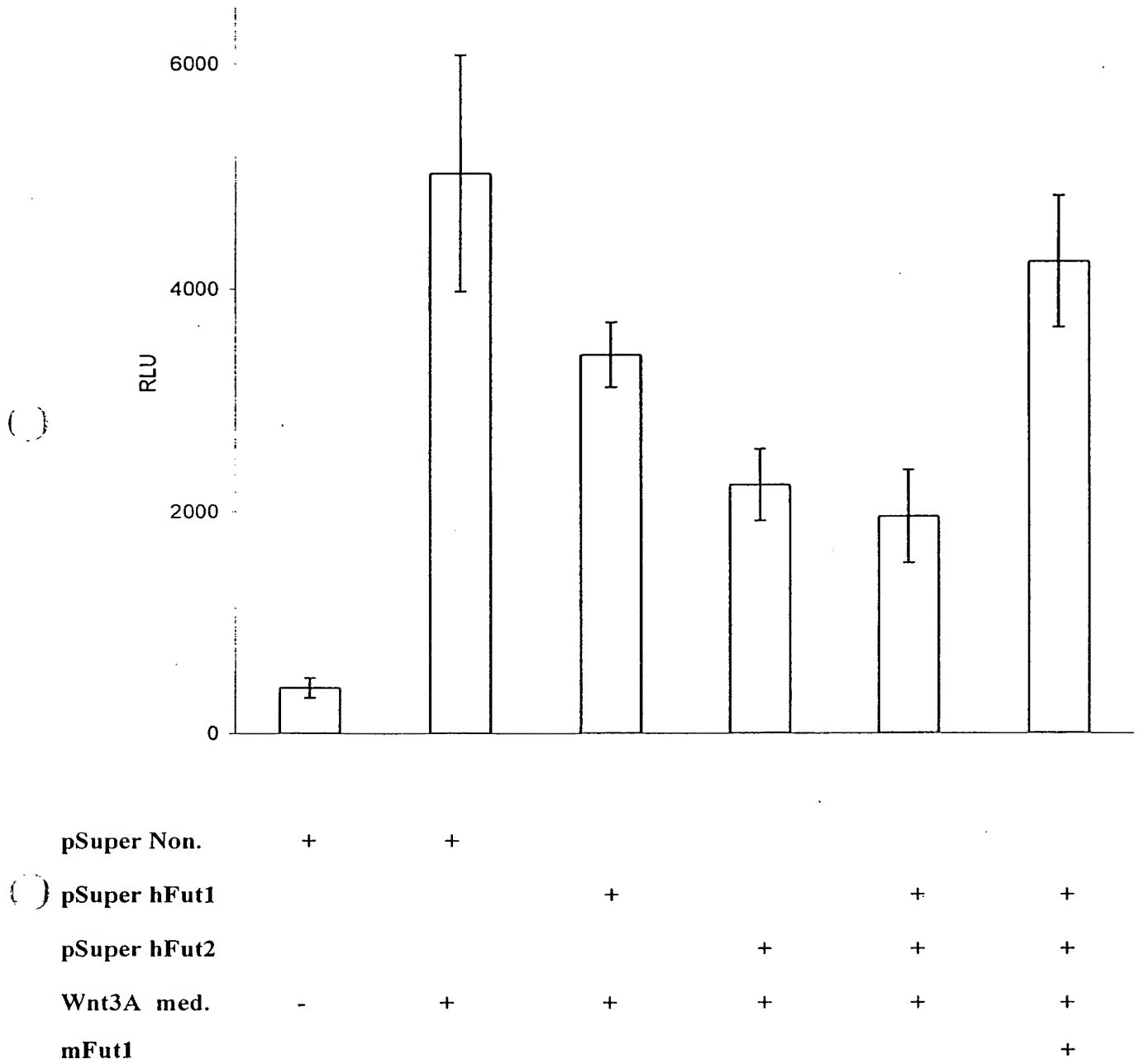


Figure 7

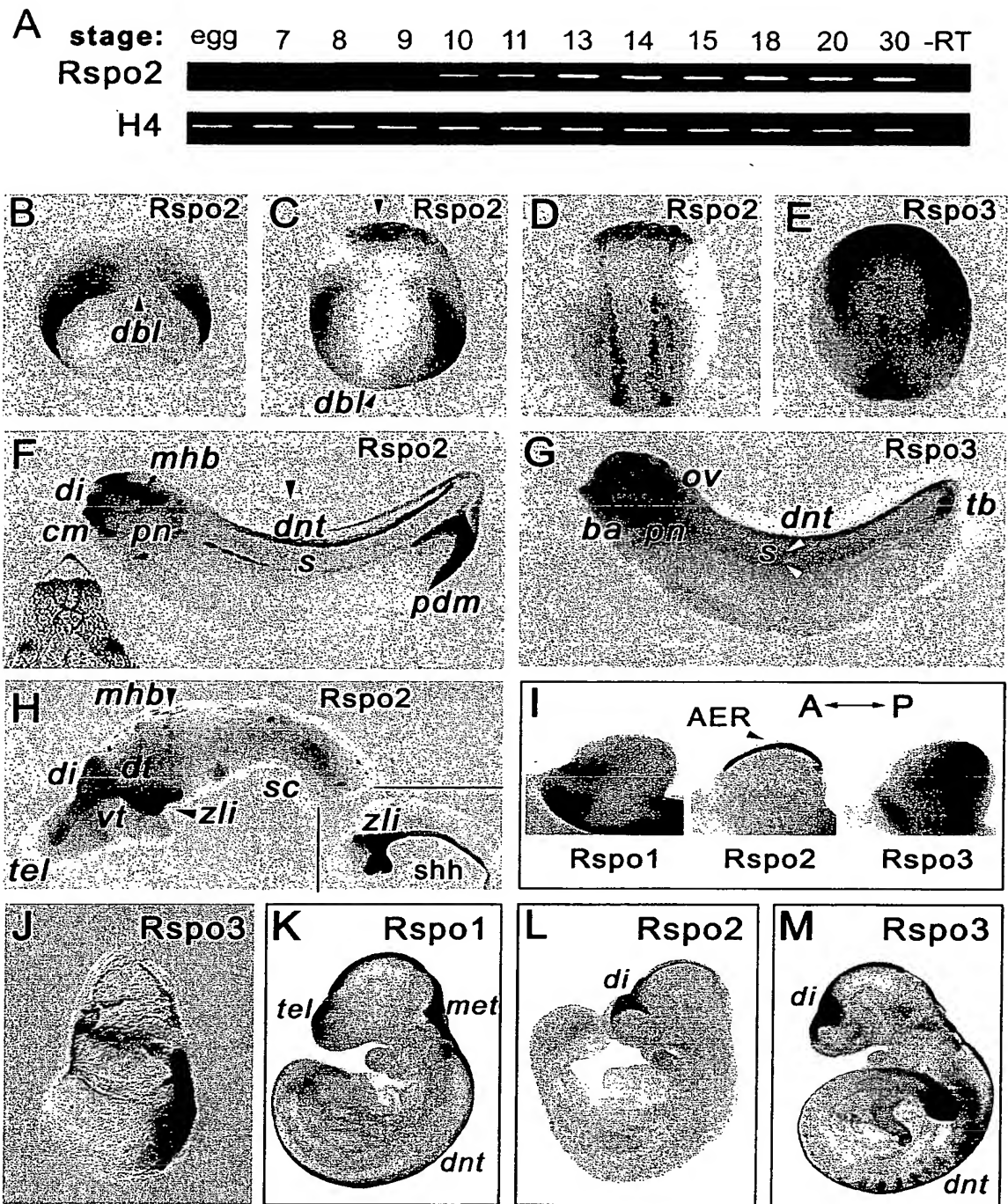


Figure 8

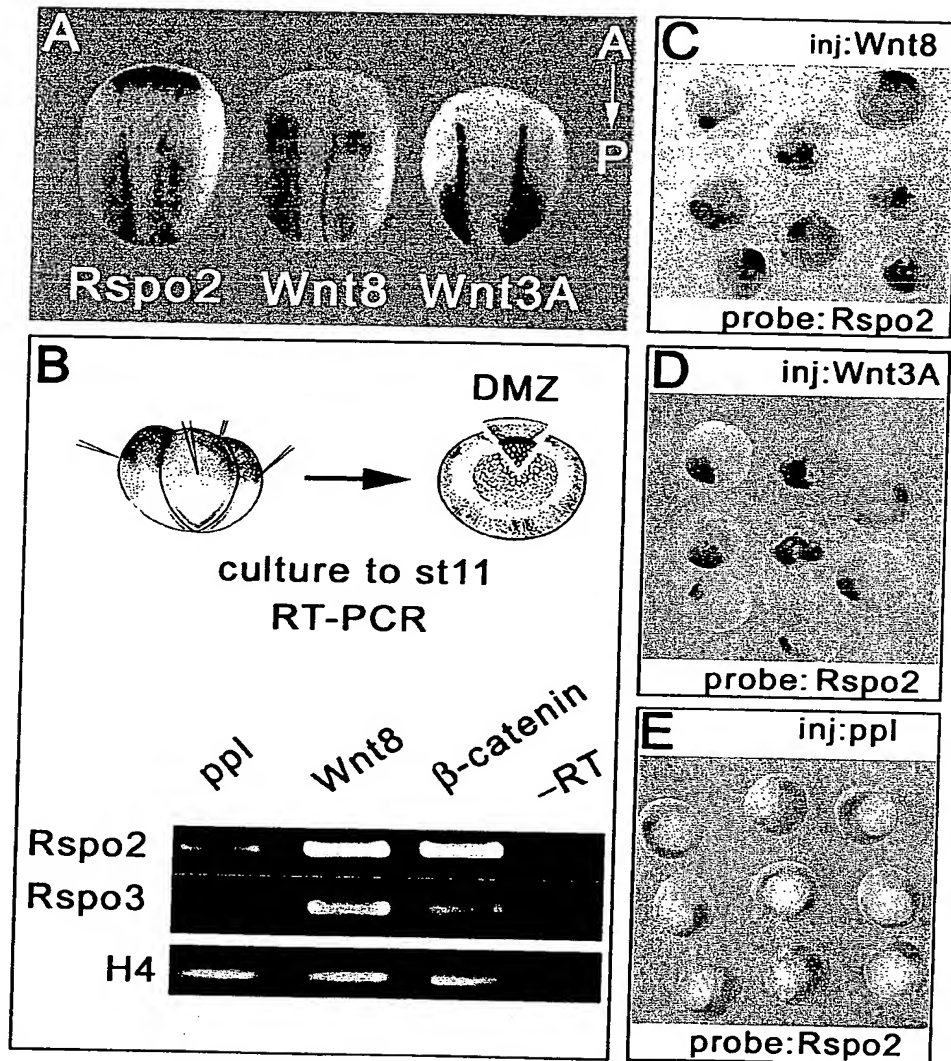
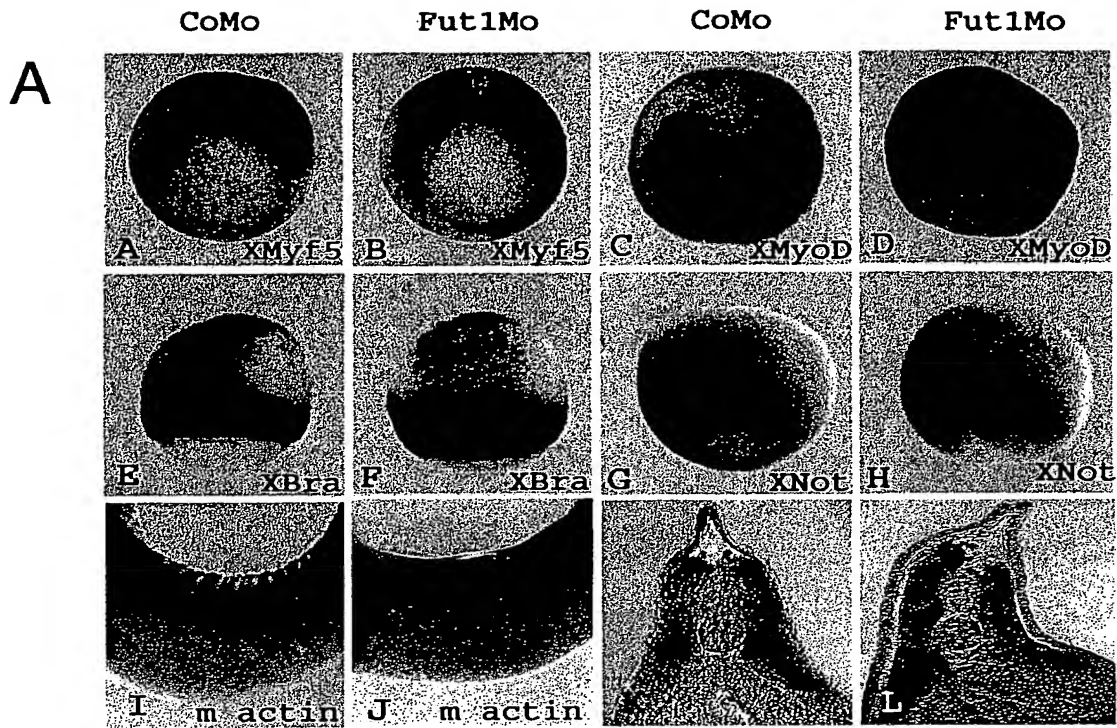


Figure 9



B

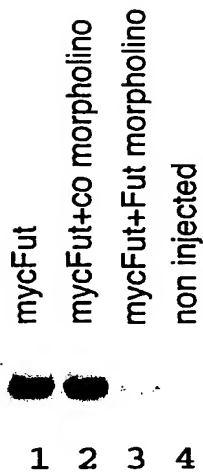
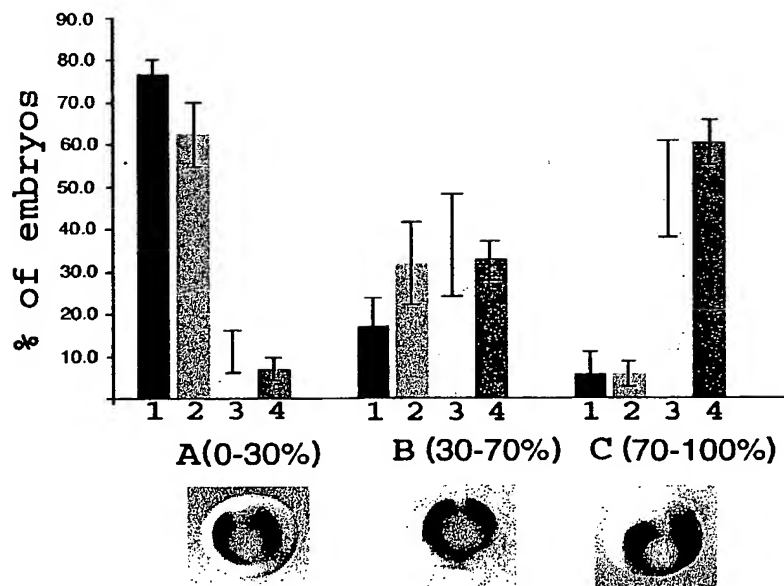


Figure 10

C



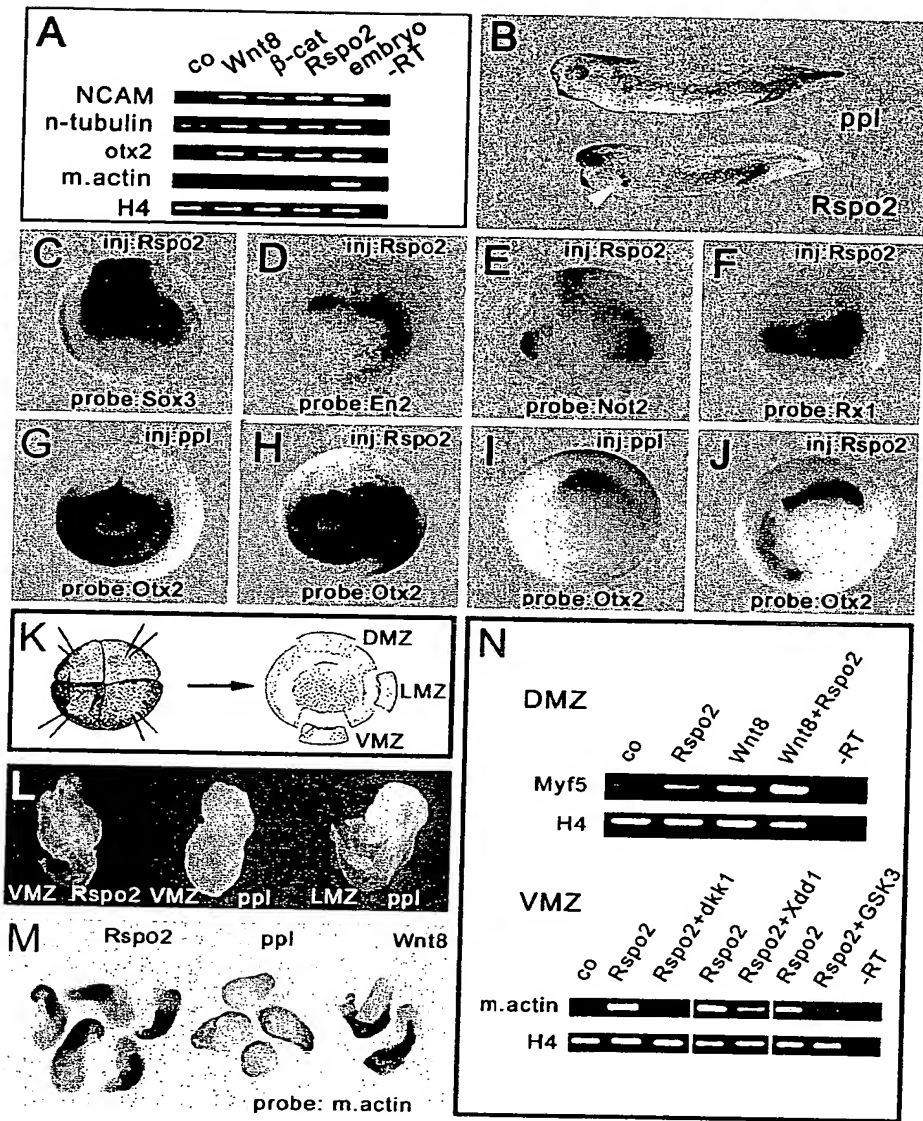
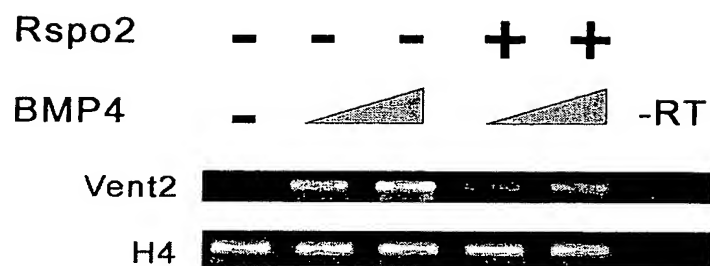
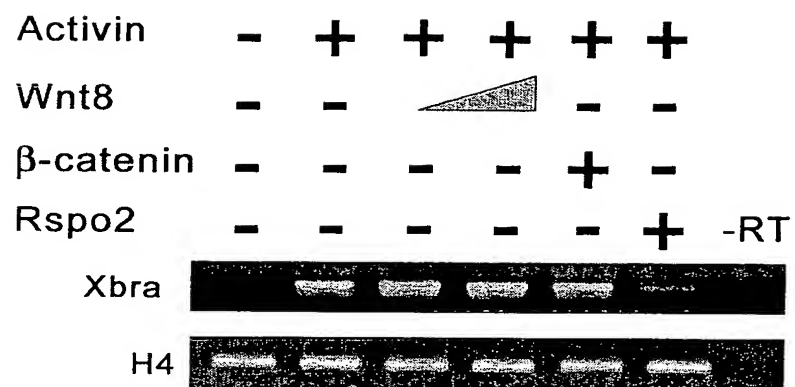


Figure 11

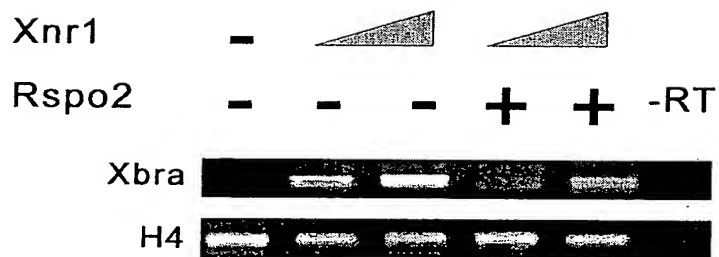
A



B



C



D

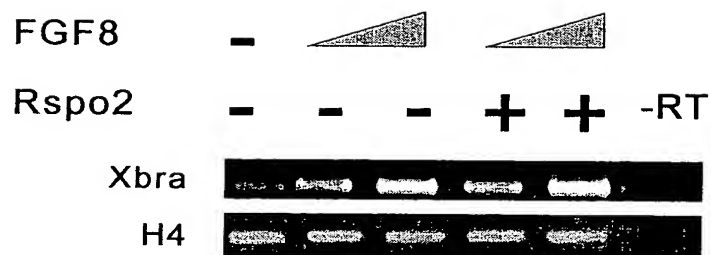


Figure 12

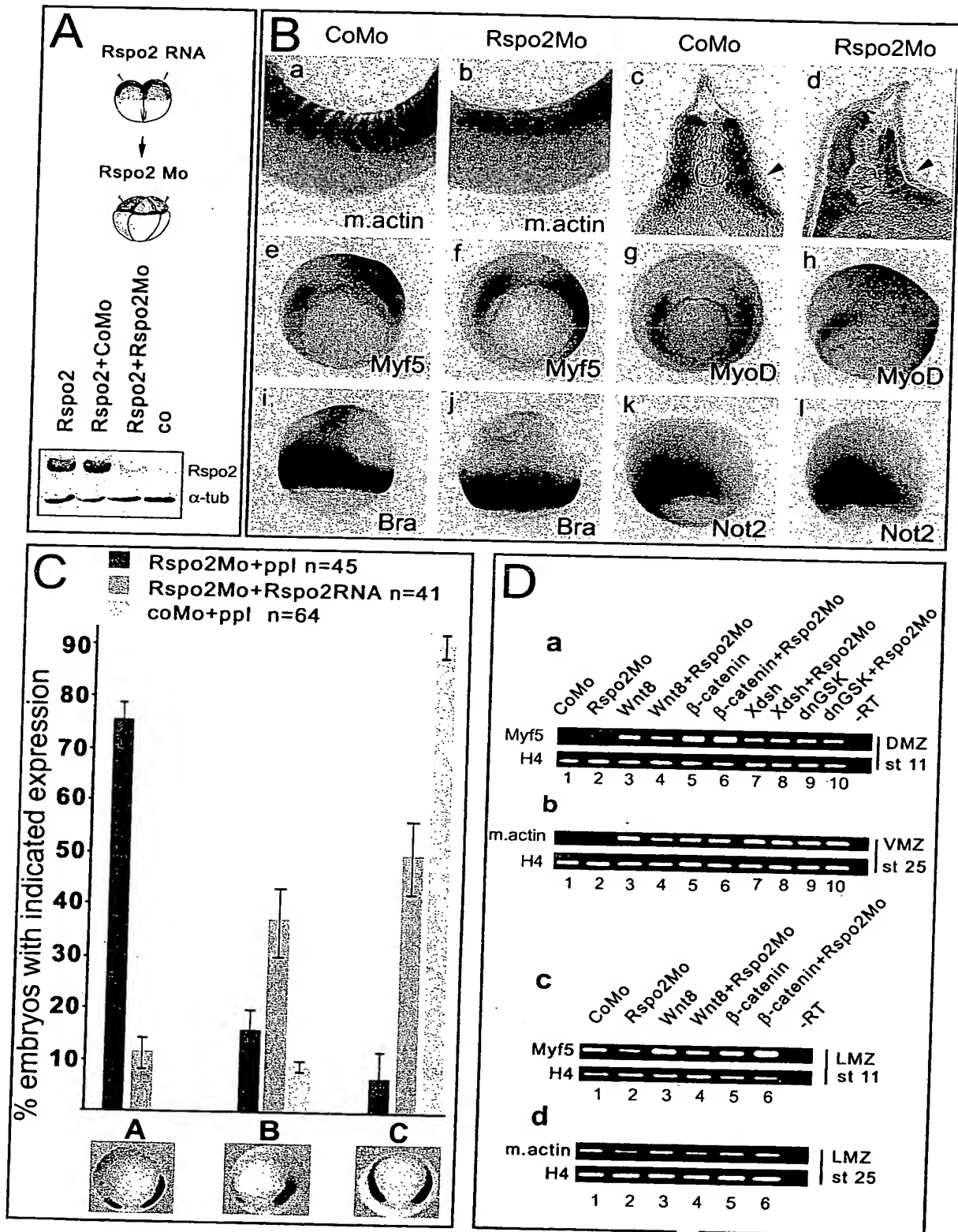


Figure 13

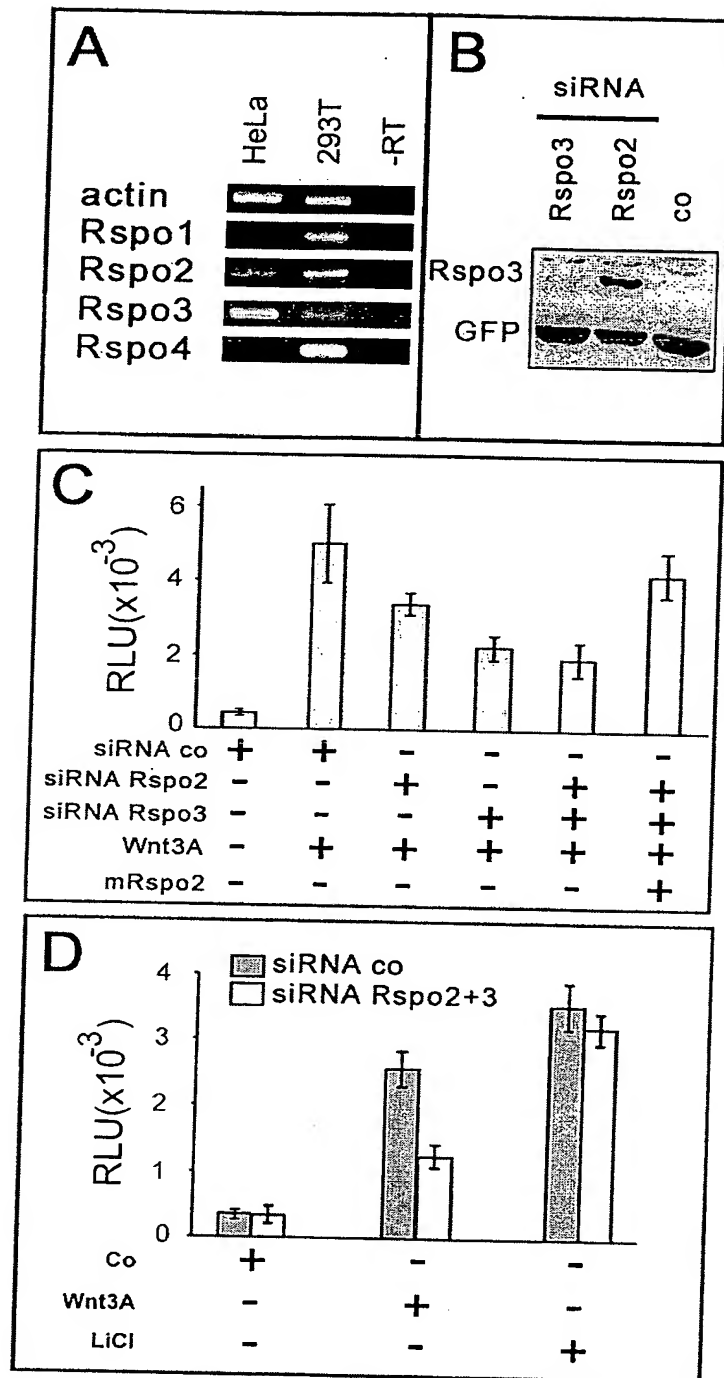
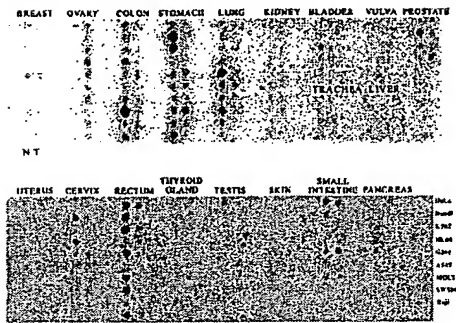
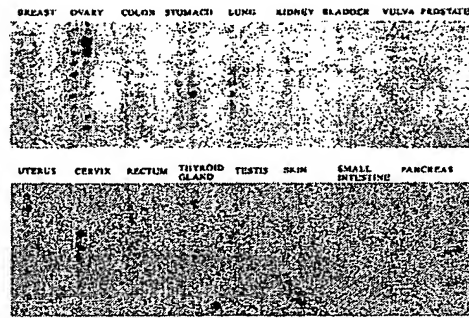


Figure 14

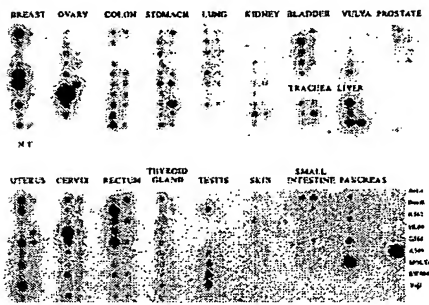
hFutrin1



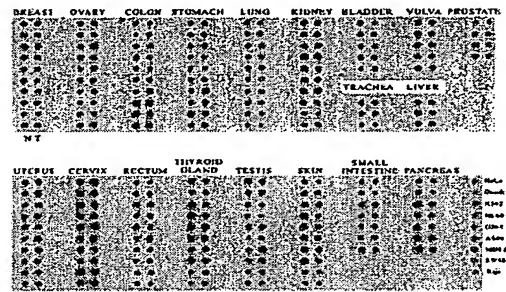
hFutrin3



hFutrin2



Ubiquitin



hFutrin4



Figure 15

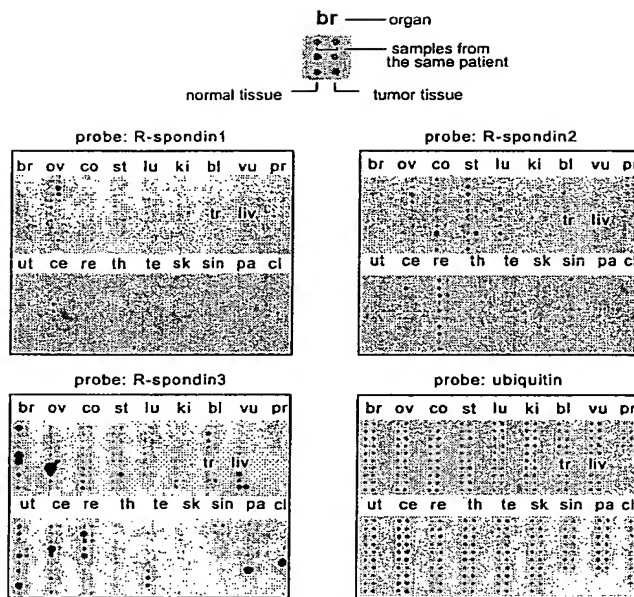
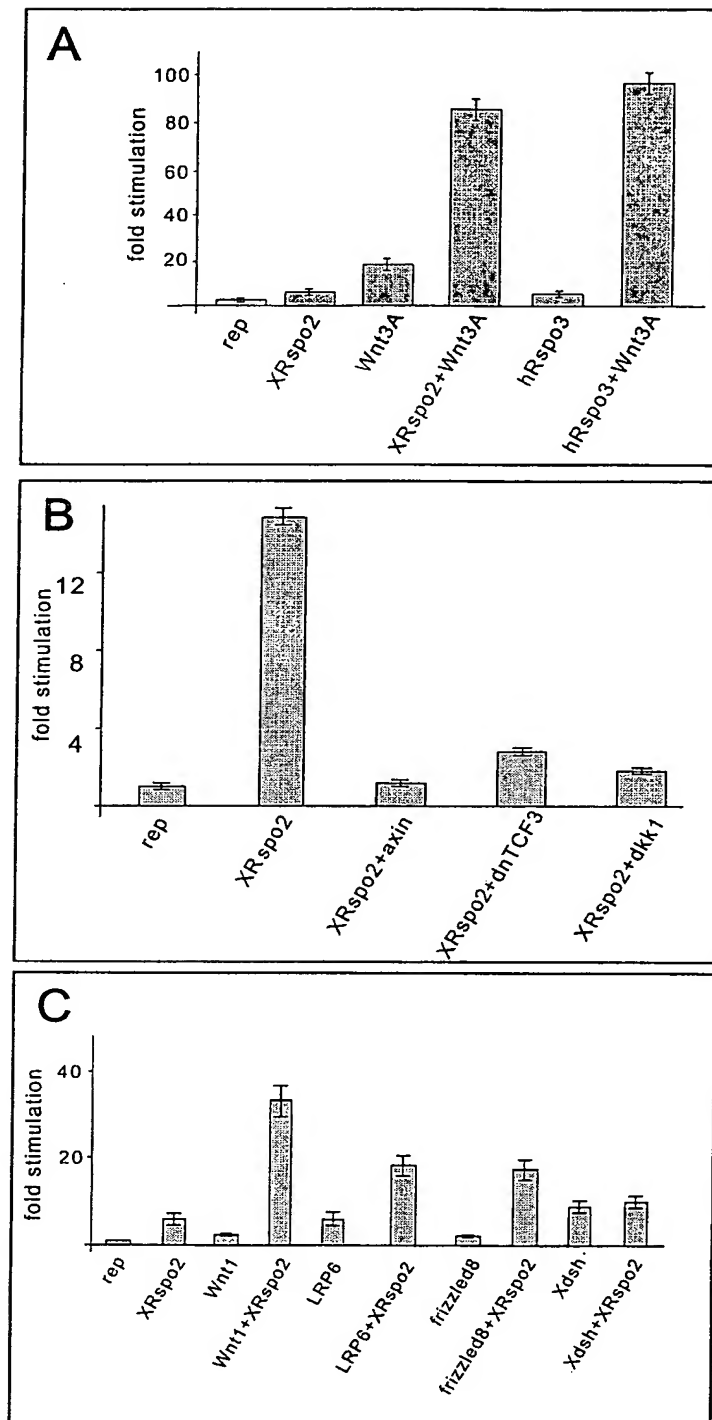


Figure 16



Figure

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☒ **FADED TEXT OR DRAWING**
- ☒ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☒ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.